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09/585,945	06/02/2000	Todd D. Turnidge	SUN1P283/P4906	5544

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EXAMINER	
PARTON, KEVIN S	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/585,945	TURNIDGE, TODD D.	
	Examiner	Art Unit	
	Kevin Parton	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12-17 and 22-42* is/are rejected.

7)☒ Claim(s) *11 and 18-21* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

2. The previous allowance of claims 13-26 is withdrawn in view of the new references and rejection detailed below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-10, 12-17, and 22-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (USPN 6,603,488) in view of Johnson (USPN 6,788,980).

5. Regarding claim 1, Humpleman et al. (USPN 6,603,488) teach a system for the control of devices comprising:

a. A request handler worker for handling an incoming query relating to an operational state of the device (figure 3A; column 7, lines 31-51; column 8, lines 13-22).

b. A plurality of services wherein a service performs operations for replying to the incoming query (figure 3A; column 7, lines 31-51; column 8, lines 13-22).

c. An operations worker for generating output containing a reply to the incoming query using at least one of the plurality of service, wherein the reply provides state information regarding the operation of the device, the reply in a format suitable for a browser (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

Although the system disclosed by Humpleman et al. (USPN 6,603,488) shows substantial features of the claimed invention, it fails to disclose means wherein the device is a virtual machine.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488) as evidenced by Johnson (USPN 6,788,980).

In an analogous art, Johnson (USPN 6,788,980) discloses a system for the control and monitoring of a virtual machine (abstract; column 3, lines 43-51; column 4, lines 29-38).

Given the teaching of Johnson (USPN 6,788,980), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Humpleman et al. (USPN 6,603,488) by specifically applying it to a virtual machine. This benefits the system by allowing a user to monitor the function of a virtual machine from a remote terminal.

6. Regarding claim 2, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 1. They further teach means wherein the request handler worker is an http thread (column 6, lines 15-26).

7. Regarding claim 3, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 2. They further teach means wherein the incoming query is in http format (column 6, lines 15-26).

8. Regarding claim 4, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 1. They further teach means wherein the request handler worker further includes a query parser for parsing the incoming query such that one of the plurality of services is identified for use by the operations worker to generate the reply to the incoming query (figure 3A; column 7, lines 31-51; column 8, lines 13-22).

9. Regarding claim 5, although the system disclosed by Humpleman et al. (USPN 6,603,488) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the request handler worker is created upon starting up the virtual machine.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488) as evidenced by Johnson (USPN 6,788,980).

In an analogous art, Johnson (USPN 6,788,980) discloses a system wherein the request handler worker is created upon starting up the virtual machine (abstract; column 3, lines 43-51; column 4, lines 29-38).

Given the teaching of Johnson (USPN 6,788,980), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Humpleman et al. (USPN 6,603,488) by starting the virtual machine to be

monitored on startup. This benefits the system by allowing for control to take place from the time that the device begins operating.

10. Regarding claim 6, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 1. They further teach means wherein the request handler worker functions as a network traffic manager for routing queries and responses (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

11. Regarding claim 7, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 1. They further teach means wherein the plurality of services contains an index of available services and parameters for each service (figure 8).

12. Regarding claim 8, although the system disclosed by Humpleman et al. (USPN 6,603,488) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the operation worker is a virtual machine operations thread.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488) as evidenced by Johnson (USPN 6,788,980).

In an analogous art, Johnson (USPN 6,788,980) discloses a system wherein the operation worker is a virtual machine operations thread (abstract; column 3, lines 43-51; column 4, lines 29-38).

Given the teaching of Johnson (USPN 6,788,980), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Humpleman et al. (USPN 6,603,488) by specifically applying it to a virtual

machine. This benefits the system by allowing a user to monitor the function of a virtual machine from a remote terminal.

13. Regarding claim 9, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 1. They further teach a request data structure for transferring data between the request handler worker and the operations worker (figure 3A; column 7, lines 31-51; column 8, lines 13-22).

14. Regarding claim 10, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 9. They further teach means wherein the request handler worker creates the request data structure that identifies one of the plurality of services to be used by the operations worker for generating the reply to the incoming query (figure 3A; column 7, lines 31-51; column 8, lines 13-22).

15. Regarding claim 12, although the system disclosed by Humpleman et al. (USPN 6,603,488) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the virtual machine is a Java virtual machine.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488) as evidenced by Johnson (USPN 6,788,980).

In an analogous art, Johnson (USPN 6,788,980) discloses a system wherein the virtual machine is a Java virtual machine (abstract; column 3, lines 43-51; column 4, lines 29-38).

Given the teaching of Johnson (USPN 6,788,980), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying

the system of Humpleman et al. (USPN 6,603,488) by specifically applying it to a virtual machine. This benefits the system by allowing a user to monitor the function of a Java virtual machine from a remote terminal.

16. Regarding claims 13 and 26, Humpleman et al. (USPN 6,603,488) teach a system for handling an incoming query to a device with means for:

a. Invoking a network traffic worker for receiving the request (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

b. Receiving a request from a browser (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

c. Processing the request to determine a service needed to respond to the request (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

d. Creating a request data structure identifying the service needed to respond to the request (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

e. Effecting a response to the request by passing the request data structure to an operations worker, wherein the response only provides insight into or effects the operation of the device (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

f. Transmitting the response to the browser (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

Although the system disclosed by Humpleman et al. (USPN 6,603,488) shows substantial features of the claimed invention, it fails to disclose means wherein the device is a virtual machine.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488) as evidenced by Johnson (USPN 6,788,980).

In an analogous art, Johnson (USPN 6,788,980) discloses a system for the control and monitoring of a virtual machine (abstract; column 3, lines 43-51; column 4, lines 29-38).

Given the teaching of Johnson (USPN 6,788,980), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Humpleman et al. (USPN 6,603,488) by specifically applying it to a virtual machine. This benefits the system by allowing a user to monitor the function of a virtual machine from a remote terminal.

17. Regarding claim 14, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 13. They further teach means for invoking a web server in the virtual machine (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

18. Regarding claim 15, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 14. They further teach means for creating a request thread (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

19. Regarding claim 16, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 15. They further teach means wherein receiving a request from a browser further includes establishing a secure http connection where the request is an http request (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

20. Regarding claim 17, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 13. They further teach means wherein processing the request further includes parsing the request into segments thereby determining the service needed to respond to the request (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

21. Regarding claim 22, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 13. They further teach means for performing operations in the device using the service and under the control of the device operations worker (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

Although the system disclosed by Humpleman et al. (USPN 6,603,488) shows substantial features of the claimed invention, it fails to disclose means wherein the device is a virtual machine.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488) as evidenced by Johnson (USPN 6,788,980).

In an analogous art, Johnson (USPN 6,788,980) discloses a system for the control and monitoring of a virtual machine (abstract; column 3, lines 43-51; column 4, lines 29-38).

Given the teaching of Johnson (USPN 6,788,980), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Humpleman et al. (USPN 6,603,488) by specifically applying it to a virtual machine. This benefits the system by allowing a user to monitor the function of a virtual machine from a remote terminal.

22. Regarding claim 23, although the system disclosed by Humpleman et al. (USPN 6,603,488) (as applied to claim 13) shows substantial features of the claimed invention, it fails to disclose means for stopping normal operation of the virtual machine while the request is acted on.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Humpleman et al. (USPN 6,603,488) by stopping the operation of the virtual machine while requests are acted on. This benefits the system by allowing the user to get the most accurate picture of the system status without changes taking place while the request is acted on.

23. Regarding claim 24, Humpleman et al. (USPN 6,603,488) teach all the limitations as applied to claim 13. They further teach means for sending a response

from the virtual machine operations worker to the network traffic worker (column 5, lines 42-48; figure 3A; column 7, lines 31-51; column 8, lines 13-22).

24. Regarding claim 25, Humpleman et al. (USPN 6,603,488) teaches all the limitations as applied to claim 13. They further teach means wherein transmitting the response to the browser further includes the network traffic manager sending the response to the browser (figure 3A; column 6, lines 15-27).

25. Regarding claims 27-32 and 37-42, although the system disclosed by Humpleman et al. (USPN 6,603,488) (as applied to claims 1 and 13) shows substantial features of the claimed invention, it fails to disclose specifically means wherein the state information includes one of the following: application runtime information, steady state runtime information, memory information, thread information, object information, and profiling information.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Humpleman et al. (USPN 6,603,488) by including these types of information as the requested state information. This benefits the system by providing a wide range of different types of information.

26. Regarding claims 33-36, although the system disclosed by Humpleman et al. (USPN 6,603,488) (as applied to claims 1 and 13) shows substantial features of the claimed invention, it fails to disclose specifically means wherein the plurality of services

include one of the following: a heap objects service, a profiling service, a memory usage service, and a thread service.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Humpleman et al. (USPN 6,603,488).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Humpleman et al. (USPN 6,603,488) by including these types of services. This benefits the system by providing service to return a wide range of different types of information.

Allowable Subject Matter

27. Claims 11 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (571)272-3958. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Parton
Examiner
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